

Claims

1. A communication system (100)
 - having a fixed communication network (101),
 - 5 • having a mobile radio communication network (102),
 - a mobile radio network-fixed network interface computer (116) which is connected to the fixed communication network (101) and to the mobile radio communication network (102) for mapping a data stream
 - 10 between the fixed communication network (101) and the mobile radio communication network (102),
 - having a superpeer host computer (120) which is connected to the mobile radio network-fixed network interface computer (116),
 - 15 • having a peer-to-peer message filter (117) which is disposed in the mobile radio communication network (101) and which is set up such that peer-to-peer messages (119) supplied to the peer-to-peer message filter (117) from the mobile radio communication
 - 20 network (101) are identified and can be delivered to the superpeer host computer (120),
 - wherein at least one digital rights management service is installed in the superpeer host computer (120), by means of which digital rights management
 - 25 service usage rights with regard to an electronic file which is transmitted from or to the mobile radio network-fixed network interface computer (116) are specified.
- 30 2. The communication system (100) according to claim 1, wherein the at least one digital rights management service is set up such that at least one of the following steps can be performed on the electronic file:

- Insert a digital rights management coding scheme by means of which it is specified that the electronic file will become unusable after a predefined time has elapsed or at a predefined time;
 - 5 • Modify the contents of the electronic file;
 - Remove part of the electronic file;
 - Scan for a computer virus, a worm or a Trojan horse;
 - Sign the contents of the electronic file.
- 10 3. The communication system (100) according to claim 1 or 2,
having a digital rights provider computer which is connected to the superpeer host computer (120) and is set up such that it transmits to the superpeer host computer
- 15 (120) the rights to be taken into account for the electronic file in each case.
4. The communication system (100) according to one of the claims 1 to 3,
- 20 wherein the fixed communication network (101) is based on internet protocols.
5. The communication system (100) according to one of the claims 1 to 4,
- 25 wherein the superpeer host computer (120) is disposed in the mobile radio communication network (102).
6. The communication system (100) according to one of the claims 1 to 5,
- 30 wherein the mobile radio communication network (102) is based on a mobile radio system of the third or a succeeding generation.
7. The communication system (100) according to claim 6,

wherein the mobile radio communication network (102) is based on one of the following mobile radio communication networks:

- Universal Mobile Telecommunications System (UMTS),
- 5 • Future Public Land Mobile Telephone System (FPLMTS).

8. The communication system (100) according to one of the claims 1 to 6,

wherein the mobile radio communication network (102) is based on a mobile radio communication network according to Groupe Speciale Mobile (GSM).

9. The communication system (100) according to claim 6,

- wherein the mobile radio communication network (102) is based on the Universal Mobile Telecommunications System (UMTS), and
- wherein the mobile radio network-fixed network interface computer (116) is a Gateway GPRS Support Node computer.

10. The communication system (100) according to one of the claims 1 to 9,

having an installation mechanism which is set up such that a peer-to-peer service is installed in the superpeer computer (120) if said service is requested sufficiently frequently.

11. The communication system (100) according to one of the claims 1 to 10,

wherein there is installed in the superpeer host computer (120) at least one search service by means of which information relating to the electronic file is determined by the computers provided in the fixed communication network (101) and made available for further processing.

12. A peer-to-peer superpeer host computer (120) in which there is installed at least one digital rights management service by means of which usage rights with regard to an electronic file which is transmitted from or to the mobile radio network-fixed network interface computer (116) are specified.

13. A method for processing a peer-to-peer message,
- wherein a mobile radio peer-to-peer message (118) is identified by a peer-to-peer message filter computer (116, 117) disposed in a mobile radio communication network (101),
 - wherein the mobile radio peer-to-peer message (118) is transmitted to a superpeer computer (120) connected to a mobile radio network-fixed network interface computer (116), and,
 - wherein the mobile radio peer-to-peer message (119) is processed by the superpeer host computer (120), and
 - wherein an electronic file identified by the superpeer host computer (120) according to the mobile radio peer-to-peer message (119) is processed according to a digital rights management service installed in the superpeer host computer (120).